

## Earth Science Program and Flight Elements

1999

**Landsat 7** (4/99)

- ETM+
- Terrestrial surface

**QuikScat** (6/99)

SeaWinds

- Surface wind speed and direction over the global oceans

**Terra** (12/99)

CERES (2) MISR MODIS  
ASTER MOPITT

- Clouds, aerosols, and radiative balance
- Characterization of terrestrial surface
- Carbon cycle

**ACRIMSAT** (12/99)

- ACRIM III
- Solar irradiance

2000

**EO-1** (10/00)

ALI Hyperion  
Atmospheric Corrector

- Innovative approach to future land imaging

**Jason -1** (11/00)

France

JMR Poseidon 2  
**DORIS** TRSR LRA

- Ocean circulation
- Sea level

**Aqua** (12/00)

CERES (2) MODIS **AMSR-E**  
AIRS / AMSU-A / HSB

- Clouds, precipitation, and radiative balance
- Atmospheric temperature / moisture profile
- Terrestrial snow and sea ice
- Sea-surface temperature and ocean productivity

**METEOR 3M/SAGE III** (12/00)

Russia

**SAGE III**

- Atmospheric aerosols
- Atmospheric chemical species

2001

**QuikTOMS** (1/01)

TOMS

- Ozone monitoring

**ICESat** (7/01)

GLAS GPS

- Ice sheet mass balance
- Cloud heights
- Sea level change
- Land topography

**GRACE** (7/01)

HAIRS GPS **SuperStar**

- Time-varying nature of Earth's gravity field

**Triana** (10/01)

EPIC NISTAR Plasma-Mag

- Full-disk, sun-lit view of Earth from L1
- Sunrise-to-sunset changes in ozone, aerosols and UV
- Albedo from retro-reflectance angle

**ADEOS II** (11/01)

Japan

SeaWinds

AMSR GLI ILAS-2 POLDER

- Surface wind speed and direction over the global oceans

2002

**VCL** (5/02)

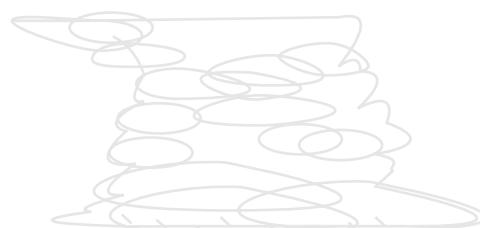
MBLA GPS

- Vegetation canopy heights

**SORCE** (7/02)

TIM SIM SOLSTICE XPS

- Solar spectral irradiance
- Total solar irradiance



Ecosystem Dynamics

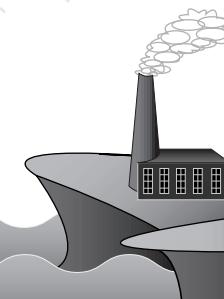


Volcanology

Ice Sheets

Sea Ice

Ocean Biology



Evaporation

Land Biology

- A DARK BOX WITH WHITE TEXT (**A**) INDICATES AN INSTRUMENT PROVIDED BY AN INTERNATIONAL PARTNER
- A WHITE BOX WITH DARK TEXT (**A**) INDICATES A JOINT US / INTERNATIONAL PARTNERSHIP

18 May 2000

## Earth Science Program and Flight Elements

1999

**Landsat 7** (4/99)

- ETM+
- Terrestrial surface

**QuikScat** (6/99)

SeaWinds

- Surface wind speed and direction over the global oceans

**Terra** (12/99)

CERES (2) MISR MODIS  
ASTER MOPITT

- Clouds, aerosols, and radiative balance
- Characterization of terrestrial surface
- Carbon cycle

**ACRIMSAT** (12/99)

ACRIM III

- Solar irradiance

2000

**EO-1** (10/00)

ALI Hyperion  
Atmospheric Corrector

- Innovative approach to future land imaging

**Jason -1** (11/00)

France

JMR Poseidon 2  
DORIS TRSR LRA

- Ocean circulation
- Sea level

**Aqua** (12/00)

CERES (2) MODIS AMSR-E  
AIRS / AMSU-A / HSB

- Clouds, precipitation, and radiative balance
- Atmospheric temperature / moisture profile
- Terrestrial snow and sea ice
- Sea-surface temperature and ocean productivity

**METEOR 3M/SAGE III** (12/00)

Russia

SAGE III

- Atmospheric aerosols
- Atmospheric chemical species

2001

**QuikTOMS** (1/01)

TOMS

- Ozone monitoring

**ICESat** (7/01)

GLAS GPS

- Ice sheet mass balance
- Cloud heights
- Sea level change
- Land topography

**GRACE** (7/01)

HAIRS GPS SuperStar

- Time-varying nature of Earth's gravity field

**Triana** (10/01)

EPIC NISTAR Plasma-Mag

- Full-disk, sun-lit view of Earth from L1
- Sunrise-to-sunset changes in ozone, aerosols and UV
- Albedo from retro-reflectance angle

**ADEOS II** (11/01)

Japan

SeaWinds

AMSR GLI ILAS-2 POLDER

- Surface wind speed and direction over the global oceans

2002

**VCL** (5/02)

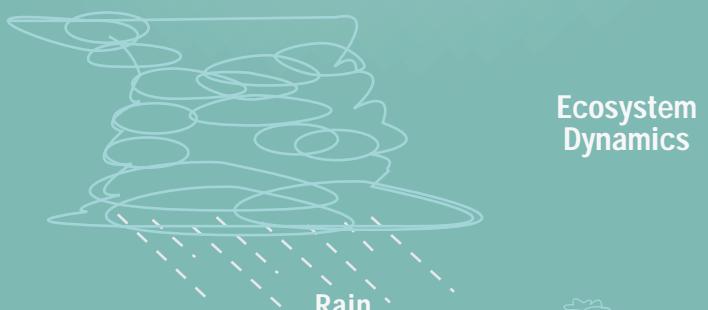
MBLA GPS

- Vegetation canopy heights

**SORCE** (7/02)

TIM SIM SOLSTICE XPS

- Solar spectral irradiance
- Total solar irradiance



Ice Sheets

Sea Ice

Ocean Biology

Volcanology



Land Biology

Ecosystem Dynamics

- A DARK BOX WITH WHITE TEXT (**A**) INDICATES AN INSTRUMENT PROVIDED BY AN INTERNATIONAL PARTNER
- A WHITE BOX WITH DARK TEXT (**A**) INDICATES A JOINT US / INTERNATIONAL PARTNERSHIP

18 May 2000